

REMARKS

Introduction

Claims 1 – 9 were previously pending in the present application. Claims 7 and 9 have been cancelled. Claim 10 has been added by way of this amendment, and claims 2 – 6 and 8 have been amended to better define the invention and present these claims in better form for consideration on appeal. No new matter has been added. Accordingly, claims 1 – 6, 8, and 10 are presently pending for consideration in this application.

Drawing

Figure 2B has been amended to replace one of the two references to number “14” to number “12” to correctly refer to the headliner. Figure 2C has also been amended to switch reference numbers “10” and “16” to correctly refer to the trim ring and energy directors, respectively. As such, replacement Figures 2B and 2C, which include the respective changes, are submitted herewith on a separate replacement drawing sheet as an attachment. The replacement Figures 2B and 2C clearly show the correct respective reference numbers.

Claim Rejections

35 U.S.C. § 103(a)

Claim 1 was rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 5,108,147 to Grimm et al. in view of U.S. Patent 6,124,886 to DeLine et al. Claims 2 – 5 and 8 – 9 were rejected as being unpatentable over Grimm et al. and DeLine et al. as applied to claim 1 and further in view of U.S. Patent 4,618,516 to Sager. Also, claim 6 was rejected as being unpatentable over Grimm et al., DeLine et al., and Sager as applied to claim 2 and further in view of U.S. Patent 4,231,609 to Sorensen. The applicants cannot agree with the Examiner that the respective inventions

claimed would have been obvious to one of ordinary skill in the art in view of these references. Accordingly, for the reasons set forth below, the applicants respectfully traverse these rejections and request reconsideration of this application.

The Prior Art

The Grimm et al. '147 Patent

The Grimm et al. '147 patent is directed toward *a clip device 10 for fastening a headliner 13 to a frame 4 of a roof*. Specifically, Grimm et al. disclose an S-shaped clip device 10 that has a lower groove 11 that slides onto a portion of the roof frame 4 of a vehicle to securely attach the clip device 10 to the roof frame 4. The "S" shape of the clip device 10 further provides an inwardly extending upper groove 18 that cooperates with a bendable upper edge strip 17 of a specifically constructed headliner 13 to secure the headliner 13 to the roof frame 4. The portion of the headliner 13 that surrounds the open-roof-frame area 2 has an upwardly directed bent edge 14. The bent edge 14 has the upper edge strip 17, which is formed having a bending notch 15 that allows the upper edge strip 17 to be bent back over the horizontal portion of the headliner 13 and inserted into and securely retained by the upper groove 18 of the clip device 10. In this manner, the disclosure of the Grimm et al. '147 patent provides a clip device 10 for use with a particular headliner construction to physically clip the headliner 13 directly to the roof frame 4 of the vehicle. However, *the disclosure does not concern itself with a method of securing a separate trim piece to the headliner*. More specifically, the Grimm et al. '147 patent neither discloses nor suggests a *method of installing a trim ring to a headliner* of a motor vehicle that includes the steps of stacking a sonic horn with the headliner and the trim ring and vibrating the sonic horn such that the trim ring and headliner bond and weld together in at least one weld area as required by independent claim 1.

The DeLine et al. '886 Patent

The DeLine et al. '886 patent is directed toward a device that provides *a modular rearview-mirror assembly 270 incorporating one or more integrated modules*. Specifically, DeLine et al. disclose a device including a variety of electronic sensors, detectors, displays, controllers, and the like so that many functional devices are incorporated into the body of the singular mirror assembly 270. Beyond the complexity of the various devices incorporated into the mirror assembly 270, the Examiner notes that in construction of the mirror assembly 270, the bezel 284 of the mirror assembly 270 may be secured to the case 272 by ultrasonic welding. Thus, while the disclosure of the DeLine et al. '886 patent provides a complex mirror assembly 270 that may utilize ultrasonic welding in its assembly, *the disclosure does not concern itself with a method of securing a separate trim piece to a headliner*. More specifically, the DeLine et al. '886 patent neither discloses nor suggests *a method of installing a trim ring to a headliner* of a motor vehicle that includes the steps of stacking a sonic horn with the headliner and the trim ring and vibrating the sonic horn such that the trim ring and the headliner bond and weld together in at least one weld area as required by independent claim 1.

The Sager '516 Patent

The Sager '516 patent is directed toward a method of ultrasonic welding of thermoplastic workpieces. Specifically, Sager discloses three examples of a first workpiece 10 having energy directors 18 that are in contact with a specific rough surface 20 of a second workpiece 12 and assist in faster dissipation of ultrasonic energy from the first workpiece 10 to the second workpiece 12. This provides more efficient thermoplastic welding with lower ultrasonic energy. The Sager process is directed to all ultrasonic thermoplastic-welding operations and is not application-specific. Thus, the Sager '516 patent does not disclose or suggest a method of installing a trim ring to a headliner of a motor vehicle that includes the steps of stacking a sonic horn with the headliner and the trim ring

and vibrating the sonic horn such that the trim ring and the headliner bond and weld together in at least one weld area as required by independent claim 1.

The Sorensen '609 Patent

The Sorensen '609 patent is directed toward a vehicle sunroof frame 20. Specifically, Sorensen discloses a vehicle sunroof frame 20 having a trim ring 50 that serves as a fastener to secure the sunroof frame 20 to the vehicle roof 14. Secondly, the trim ring 50 has a bottom flange 60 that provides support for a headliner 16 at its edge about the sunroof opening. However, the Sorensen '609 patent does not disclose or suggest a method of installing a trim ring to a headliner of a motor vehicle that includes the steps of stacking a sonic horn with the headliner and the trim ring and vibrating the sonic horn such that the trim ring and the headliner bond and weld together in at least one weld area as required by independent claim 1.

The Sonic Weld Sunroof Trim Ring of the Present Invention

In contrast to the teachings of the respective prior-art references, the present invention as defined in independent claim 1 is a method of installing a trim ring to a headliner of a motor vehicle that includes the steps of stacking a sonic horn with the headliner and the trim ring and vibrating the sonic horn such that the trim ring and the headliner bond and weld together in at least one weld area.

Argument

The Examiner agrees with the applicants that the disclosure of the Grimm et al. '147 patent "provides a clip device for use with a particular headliner construction to physically clip the headliner directly to the roof frame of the vehicle." However, the Examiner disagrees with the assertion that this disclosure "does not concern itself with a method of securing a separate trim piece

to a headliner.” Rather, the Examiner asserts that “*applicants’ own specification* explains that Grimm involves more than merely providing a clip device for use with a particular headliner construction to physically clip the headliner directly to the roof frame of the vehicle.” More specifically, the Examiner cites the part of the present application stating that “the *trim ring* is complementary to the frame and is attached to the frame by fasteners so as to finish the bottom surface.” (page 1, lines 11 – 12 of the present application). According to the Examiner, this statement “appears to contradict applicants’ arguments with respect to the teachings of Grimm.”

Although the Examiner correctly quotes the present application, this passage refers to a teaching of the Sorensen ‘609 patent. With respect to the Grimm et al. ‘147 patent, the present application states only that it teaches use of “grooves for fastening the headliner of a motor vehicle to the roof frame with a lifting or sliding roof structure” and “a lower groove to receive the edge of the flange and the upper groove receives the edge of the cut out portion” and “[t]his method also produces the look that consumers want.” As such, the statement cited by the Examiner does not contradict the applicants’ arguments with respect to teachings of the Grimm et al. ‘147 patent. In fact, the statements of the present application with respect to the respective teachings of the Grimm et al. ‘147 patent bolster the applicants’ arguments with respect to such teachings, namely, that Grimm et al. do not teach securing a trim ring to a headliner. Thus, it appears that the Examiner was referring to a description of the Sorensen ‘609 patent made by the applicants and attributing it to the Grimm et al. ‘147 patent.

The Examiner also notes that “during patent examination, the pending claims must be ‘given the broadest reasonable interpretation.’” The Examiner then asserts that “[i]n the instant case, DICTIONARY.COM defines ‘trim’ as ‘framework, in a building or vehicle.’ Thus, a ‘trim ring’ can be defined as framework, in a building or vehicle in the shape of a ring. In applying the Prater test by giving the claim its broadest reasonable interpretation, it is the examiner’s position that Grimm

teaches a 'trim ring' at figure 1, items 4 and 7 since the guide frame is a framework in a vehicle and is in the shape of a ring (figure 1, items 4 and 7)."

In its entirety, the noun form of "trim" is defined in "DICTIONARY.COM" as "exterior ornamentation, such as moldings or framework, on a building or vehicle." In turn, "DICTIONARY.COM" defines "ornamentation" as "something that decorates or adorns; an embellishment."

As such and applying the definition of "trim ring" urged by "DICTIONARY.COM," the guide frame 4 of the Grimm et al. '147 patent would have to be interpreted as an exterior, ornamental framework on the vehicle. However, the guide frame 4 is neither located exterior nor ornamental and, thus, can hardly be reasonably interpreted as "trim" as that term is defined by "DICTIONARY.COM." More specifically, as shown throughout the figures of the Grimm et al. '147 patent, the guide frame 4 is located between a roof surface 1 and a headliner 13 and is, therefore, interior. Also, the guide frame 4 does not decorate, adorn, or embellish.

Rather, the Grimm et al. '147 patent describes the U-shaped guide frame 4 as "fastened below the fixed roof surface 1, its two lateral frame parts 5 and 6 being connected with one another by means of a transverse connector 7 which stiffens the frame and also defines the roof opening at the rear. Two front and two rear water runoffs 8 and 9, respectively, adjoin the water-carrying areas of the guide frame 4. The guide rails arranged at the guide frame 4 and the elements controlling the movements of the cover 2" (column 3, lines 22 - 30). Also, the S-shaped clamping section 10 is attached to a horizontal flange 12 of the guide frame 4 by means of its lower groove 11 (column 3, lines 35 - 37), the rigid headliner 13 is advanced from below until contacting the clamping section 10 at the guide frame 4 (column 3, lines 42 - 45), the headliner 13 is fastened at the guide frame 4 (column 3, lines 60 - 61), a clamping section 10 can be provided in a continuous manner at all four

sides of the guide frame 4 (column 4, lines 13 - 16), and a guide rail 22 is integrated with the guide frame 4 (column 4, lines 20 - 21).

In summary, the guide frame 4 is adapted to serve various functions, none of which being to decorate, adorn, or embellish. As a result, the guide frame 4 can hardly be reasonably interpreted as being a “trim ring.” More importantly, there is absolutely no teaching in the Grimm et al. ‘147 patent that relates to a method of installing a trim ring to a headliner of a motor vehicle.

On the other hand, the disclosure of the DeLine et al. ‘886 patent is directed toward a structurally dissimilar device that provides a complex rearview-mirror assembly that may utilize ultrasonic welding in its construction. Thus, a combination of these disclosures results in, at most, *ultrasonically welding a particular headliner directly to a frame of a vehicle roof*.

Not only does this combination in no way concern a method of *securing a separate trim piece to a headliner* as defined in independent claim 1, but this combination also requires eliminating the clip device, the very same device toward which the disclosure of the Grimm et al. ‘147 patent is directed. In this regard, there is a fundamental axiom in U.S. patent law that if a reference must be reconstructed or rearranged to change its operation to meet an applicant’s claim, then that modification of the reference is inappropriate and cannot stand. Here, the clipping of a headliner directly to a frame of a vehicle roof of the Grimm et al. ‘147 patent definitely must be reconstructed or rearranged to change its operation to meet the securing of a separate trim piece to a headliner as defined in independent claim 1.

In short, the applicants respectfully submit that there is no motivation, suggestion, or teaching to combine the respective disclosures of the Grimm et al. ‘147 and DeLine et al. ‘886 patents. Furthermore, even if these disclosures were combined, the combination would fail to teach the method of the present invention as defined in independent claim 1.

The Sager '516 and Sorensen '609 patents do not make-up for the deficiencies of the Grimm et al. '147 and DeLine et al. '886 patents. More specifically, Sager discloses a method of ultrasonic welding of thermoplastic workpieces, and Sorensen discloses a vehicle sunroof frame 20. Neither the Sager '516 or Sorensen '609 patent relates to the method of installing a trim ring to a headliner of a motor vehicle of the present invention as defined in independent claim 1.

Thus, it is respectfully submitted that independent claim 1 recites a method that is not disclosed or suggested by the prior art and is patentably distinguishable from the subject matter of the references discussed above. The limitations of claim 9 have been incorporated into claim 6, and claim 9 has been cancelled. Each of claims 2 – 6 and 8 is ultimately dependent upon independent claim 1 and adds further perfecting limitations thereto. As such, the prior-art references, in combination with each other or each reference standing alone, do not suggest the present invention. However, even if they did, they could only be applied through hindsight after rearranging the disclosures of the prior art in view of the applicants' invention. A combination of the prior art in this way to derive the applicants' invention would, in and of itself, be an invention.

Thus, the amendments set forth herein present this application in better form for its consideration on appeal. Accordingly, the applicants respectfully request that these amendments be admitted pursuant to 37 C.F.R. § 1.116 and the rejections be withdrawn.

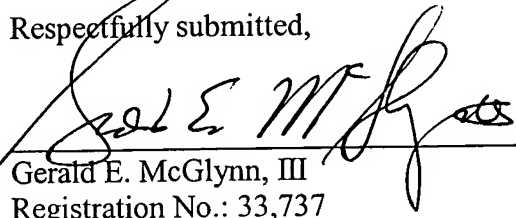
New Claim 10

Independent claim 10 was added to claim a method of installing a trim ring to a headliner of a motor vehicle including the limitations of each of claim 1 and amended claims 2, 4, and 6. No new matter has been added. The applicants respectfully submit that the combination of the limitations of claim 10 is neither disclosed nor suggested by the prior art. Accordingly, the applicants respectfully request that claim 10 be allowed.

Conclusion

Independent claim 1 recites structure that is neither disclosed nor suggested by the prior art and is patentably distinguishable from the cited art discussed above. Each of claims 2 – 6, and 8 is dependent upon claim 1 and adds perfecting limitations thereto. Independent claim 10 recites structure that is neither disclosed nor suggested by the prior art and is patentably distinguishable from the cited art discussed above. Accordingly, the applicants respectfully solicit allowance of the claims pending in the present application.

Respectfully submitted,



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